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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/631,257      | 07/31/2003  | Yun Xin Li           | CML00843AC          | 1623             |

7590 09/20/2007  
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| EXAMINER |
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HARTMANN II, KENNETH R

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| ART UNIT | PAPER NUMBER |
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2616

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| MAIL DATE | DELIVERY MODE |
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09/20/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/631,257

Applicant(s)

LI ET AL.

Examiner

Kenneth R. Hartmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**Detailed Action**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Hwang (US 2003/0095561).

For claim 1, Hwang discloses a method for providing a transmission packet, the transmission packet comprising a data independent field and a payload field, the method comprising: processing digital data to provide a modulated digital payload (performed by stream modulator, see Fig. 2 and paragraph 62, lines 1-4); obtaining predefined modulated transmission protocol bits stored in a memory (header processor, 220, retrieves encoding information from processor, 210, generates the header and waits to combine with multicast streams, see Fig. 2 and paragraph 58, lines 1-6); and combining the modulated digital payload and the predefined modulated transmission protocol bits to provide the transmission packet, wherein the modulated digital payload is in the payload field and the modulated transmission protocol bits are in the data

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independent field (frame generator combines the generated stream, payload, and the generated header, data independent field, see Fig. 2 and paragraph 62, lines 4-6).

For claims 3 and 4, Hwang discloses a method as described above, wherein the processing further includes filtering the digital data (encoding processor, 210, has three processors for performing forward error correction, interleaving each stream, and performing signal constellation mapping, see Fig. 2 and paragraph 55, lines 1-19).

For claim 16, Hwang discloses a method as described above, wherein the method has the further step of transmitting the transmission packet (Fig. 2 is a block diagram of a transmitting apparatus for transmitting the data, see paragraph 47, lines 1-3).

### ***Claim Rejections - 35 USC § 103***

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 5-13 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (US 2003/0095561) in view of Ganesan et al (US 5,812,951).

For claim 2, Hwang discloses a method as described above. Hwang does not disclose a further step of digital to analog converting the transmission packet. However, Ganesan et al. does disclose digital to analog converting the transmission packet (see Fig. 2 and column 9, lines 2-4). Therefore, it would have been obvious to one of ordinary skill in the art to add the further step of digital to analog converting the transmission packet as taught by Ganesan et al. into the method of Hwang. The motivation for adding this step would be to enable the generated frame to be transmitted more efficiently in a RF environment.

For claims 5-13, White et al. disclose a method as described above in paragraph 2 of this office action. White et al. do not disclose the modulated transmission protocol bits include a bit sequence representative of a digitally modulated, shaped, and filtered version of the synchronization sequence, packet length information, and data rate information. However, official notice is taken, as noted in applicant's own specification, that it would be apparent to a person of ordinary skill in the art that the pre-defined modulated transmission protocol bits of the preamble fields and header fields are digitally modulated, shaped, and filtered versions of the synchronization sequence, packet length information, data rate information, etc (page 8, lines 9-15). The motivation for including a bit sequence representative of a modulated, shaped, and filtered version of the synchronization sequence would be to have the packet contain accurate information that is in condition to be sent over the network.

Claim 17 is rejected for a similar reason as claim 2.

Claims 18-25 are rejected for a similar reason as claims 6-13.

6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang (US 2003/0095561) in view of White et al (US 5,495,482).

For claims 14 and 15, Hwang discloses a method as described above, wherein the obtaining includes selecting the pre-defined modulated transmission protocol bits from a group of predefined preamble bits and group of header bits, the preamble bits include a bit sequence representative of the synchronization sequence (encoding information, see Fig. 4C and paragraph 67, lines 4-9). Hwang does not disclose selecting the pre-defined modulated transmission protocol bits from a *group* of pre-defined modulated transmission protocol bits stored in the memory. White et al. does disclose storing a commonly used group of data to be selected for use as a preamble, though it is not modulated transmission protocol bits as disclosed by Hwang. Therefore, it would have been obvious to one of ordinary skill in the art to include a memory unit as taught by White al. into the method of Hwang. The motivation for including this memory unit would have somewhere to store commonly used headers, so that the generator would not need to create them every time.

### ***Conclusion***

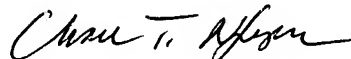
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Hartmann whose telephone number is 571-270-1414. The examiner can normally be reached on Monday - Thursday, 10 - 3 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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